Docket No.: YOR920020013US1

1   REMARKS

2   These remarks follow the order of the paragraphs of the office action. Relevant portions of the

3   office action are shown indented and italicized.

4   *Claim Objections*

5   *1.   Claim 26 objected to because of the following*
6   *informalities: it does not exist. Appropriate correction is*
7   *required.*

8   In response, applicants respectfully state that claim 26 is canceled herewith.

9   *2.   Claim 9 objected to because of the following informalities:*
10   *page 11, line 13 "requester;" should read "requester.".*
11   *Appropriate correction is required.*

12 In response, applicants respectfully state that claim 9 is canceled herewith.

13   *3.   Claim 14 objected to because of the following*
14   *informalities: pg.12, lines 8 "registry;" should read*
15   *"registry.". Appropriate correction is required.*

16 In response, applicants respectfully state that claim 14 is canceled herewith.

17   *4.   Claim 18 objected to because of the following*
18   *informalities: pg.13, lines 7 "Proxy;" should read "Proxy.".*
19   *Appropriate correction is required.*

20 In response, applicants respectfully state that claim 18 is canceled herewith.

21   *Claim Rejections - 35 USC § 102*

22   *1.   The following is a quotation of the appropriate paragraphs*
23   *of 35 u.S.e. 102 that folID the basis for the rejections under*
24   *this section made in this Office action:*

Application/Control Number: 10/053,011   **8/15**

Docket No.: YOR920020013US1

1   *A person shall be entitled to a patent unless   (e) the invention was described*
2   *in (1) an application for patent, published under section 122(b), by another*
3   *filed in the United States before the invention by the applicant for patent or*
4   *(2) a patent granted on an application for patent by another filed in the United*
5   *States before the invention by the applicant for patent, except that an*
6   *international application filed under the treaty defined in section 351(a) shall*
7   *have the effects for purposes of this subsection of an application filed in the*
8   *United States only if the international application designated the United States*
9   *and was published under Article 21 (2) of such treaty in the English language.*

10   *2   Claim 1-7, 9-16, and 18-27 rejected under 35 USe. 102(e) as*
11   *being unpatentable by US 2002/0194498 to Blight et al. Regarding*
12   *claim 1, Blight et al. teaches a method comprising a requester*
13   *discovering at least one service in a local domain, including the*
14   *steps of: obtaining an address of a proxy serving as a Service*
15   *Discovery Proxy for said local domain (page 2, section 0017 and*
16   *page 4, section 0067 and page 5, section 0110-0113); establishing*
17   *a connection to said Service Discovery Proxy; and employing said*
18   *Service Discovery Proxy in discovering dynamic availability of*
19   *said at least one service in said local domain (page 1, section*
20   *0016 and page 4, section 0075-0087 and 0104 and page 7, section*
21   *0205-0221).*

22   In response, applicants respectfully state that although there is no agreement that Blight et al.,
23   anticipates the present invention, the independent claims are amended such as to include the
24   limitations of allowable [objected to] claims. Thus, claim 1 is amended to include the limitation
25   of claim 9. Claims 10 and 11 are amended to depend on claim 1. Claim 13 is amended to include
26   the limitation of claim 14. Claim 15 is amended to include the limitation of claim 18. Claims 9,
27   14, 18 and 26 are canceled.

28   This amendment brings claims 1-8, 10-13, 15-17, 19-25, and 27 to allowance in as much as each
29   is, or is dependent upon, an allowable claim, besides not being anticipated or made obvious by
30   the cited art.

31   *Regarding claim 13, Blight et al. teaches a method comprising*
32   *forming a Service Discovery Proxy including the steps of:*
33   *assigning an available proxy to represent a local domain;*
34   *establishing a connection between said available proxy and a*

Application/Control Number: 10/053,011   **9/15**

Docket No.: YOR920020013US1

1   network (page 2, section 0017); and registering said available
2   proxy as the Service Discovery Proxy representing the local
3   domain (page 5, section 0110-0113 and 0143 and page 7, section
4   0212-0220).

5   Regarding claim 15, Blight et al. teaches a Service Discovery
6   Proxy comprising; a network communication module having an
7   assigned communication address (page 3, section 0044), a service
8   detector module to detect dynamically available services in a
9   local domain represented by said proxy (page 2, section 0017); a
10   processing module to process at least one incoming query from a
11   requester regarding availability of at least one service (page 4,
12   section 0075-0087 and 0104 and page 5, section 0110-0133); and a
13   responding module to form outgoing responses to said at least one
14   incoming query allowing discovery of any of said dynamically
15   available services by said requester (page 7, section 0205-0221).
16   Regarding claim 2, Blight et al. teaches a method as recited in
17   claim 1, fmlher comprising employing one service from said at
18   least one service (page 1, section 0001 and page 4, section 0087
19   and page 5, section 0128-0133).

20   Regarding claim 3, Blight et al. teaches a method as recited in
21   claim 1, wherein the step of obtaining includes: contacting a
22   central registry having addresses for a plurality of Service
23   Discovery Proxies; and selecting the address of a particular
24   Service Discovery Proxy serving the local domain (page 2, section
25   0017 and page 5, section 0111-0113 and page 7, section 0212
26   0215).

27   Regarding claim 4, Blight et al. teaches a method as recited in
28   claim 1, wherein the step of establishing includes employing said
29   address in accordance with a transmission protocol (page 3,
30   section 0045-0049 and page 4, section 0067 and 0101).

31   Regarding claim 5, Blight et al. teaches a method as recited in
32   claim 4, wherein the transmission protocol is TCP/IP (page 4,
33   section 0067).

Application/Control Number: 10/053,011   **10/15**

Docket No.: YOR920020013US1

1   *Regarding claim 6, Blight et al. teaches a method as recited in*
2· *claim 1, wherein the step of employing includes querying said*
3   *Service Discovery Proxy for a list of services cunently active in*
4   *said local domain (page 4, section 0104 and page 5, section*
5   *0110-0125).*

6   *Regarding claim 7, Blight et al. teaches a method as recited in*
7   *claim 1, wherein said requester provides a list of services for*
8   *which status is queried to said Service Discovery Proxy (page 4,*
9   *section 0075-0087 and page 5, section 0110-0133).*

10 *Regarding claim 9, Blight et al. teaches a method as recited in*
11 *claim 1, wherein the step of employing includes: said Service*
12 *Discovery Proxy receiving a request from said requester for*
13 *service discovery; said Service Discovery Proxy invoking a*
14 *service discovery protocol in said local domain; customizing*
15 *responses from services in said .local domain; and said Service*
16 *Discovery Proxy sending customized responses to said requester*
17 *(page 2, section 0017 and page 7, section 0205-0221).*

18 *Regarding claim 10, Blight et al. teaches a method as recited in*
19 *claim 9, wherein the step of customizing includes at least one*
20 *function taken from a group of functions including: formatting;*
21 *filtering; aggregating; encapsulating; segmenting; selecting, and*
22 *a requester defined function (page 5, section 0137).*

23 *Regarding claim 11, Blight et al. teaches a method as recited in*
24 *claim 9, wherein the service discovery protocol includes Service*
25 *Location Protocol (page 3, section 0045-0049 and page 4, section*
26 *0067 and 0101).*

27 *Regarding claim 12, Blight et al. teaches a method as recited in*
28 *claim 1, wherein the step of employing includes receiving*
29· *information enabling said requester to utilize said at least one*
30 *service (page 1, section 0001 and page 4, section 0087 and page*
31 *5, section 0128-0133).*

32 *Regarding claim14, Blight et al. teaches a method as recited in*
33 *claim 13, wherein the step of registering is performed employing*

Application/Control Number: 10/053,011   **11/15**

Docket No.: YOR920020013US1

1   *a central registry (page 2, section 0017 and page 5, section*
2   *0111-0113 and 0143 and page 7, section 0212-0214).*

3   *Regarding claim 16, Blight et al. teaches a proxy as recited in*
4   *claim 15, wherein said communication address exists in a*
5   *central registry to allow said proxy to be accessed from a*
6   *plurality of requesters (page 2, section 0017 and page 4, section*
7   *0067 and page 5, section 0111 0113 and 0142 and page 7, section*
8   *0212-0214).*

9   *Regarding claim 18, Blight et al. teaches a proxy as recited in*
10   *claim 15, wherein said network communication module obtains*
11   *an assigned network communication address ITom a network*
12   *address assigning entity; and registers said assigned network*
13   *communication address with a central registry as a Service*
14   *Discovery Proxy (page 2, section 0017 and page 4, section 0067 and*
15   *page 5, section 0111-0113 and 0142 and page 7, section*
16   *0212-0214).*

17   *Regarding claim 19, Blight et al. teaches a proxy as recited in*
18   *claim 15, wherein said service detector module communications*
19   *functionality from a group of functionalities including: supports*
20   *at least one at least one physical communication media; at least*
21   *one link protocol; at least one network protocol; at least one*
22   *transmission protocol; at least one service discovery protocol;*
23   *receiving service queries ii-om said processing module;*
24   *determining an appropriate communication protocol to be used;*
25   *performing service discovery in accordance with a selected*
26   *service discovery protocol; and any combination of these (page 3,*
27   *section 0045-0049 and page 4, section 0067 and 0075 and 0087 and*
28   *0101).*

29   *Regarding claim 20, Blight et al. teaches a proxy as recited in*
30   *claim 15, wherein said service detector module determines all*
31   *appropriate communication protocol to use (page 3, section*
32   *0045-0049 and page 4, section 0067 and 0101).*

Application/Control Number: 10/053,011   **12/15**

Docket No.: YOR920020013US1

1   *Regarding claim 21, Blight et al. teaches a proxy as recited in*
2   *claim 15, wherein said processing module performs a function*
3   *taken &om a group of functions including: querying the*
4   *availability of at least one service; querying all available*
5   *services; querying the employment of said service; interpreting*
6   *said query and invoking service detector module; and any*
7   *combination of these (page 4, section 0104 and page 5, section*
8   *0110-0125).*

9   *Regarding claim 22, Blight et al. teaches a proxy as recited in*
10   *claim 15, wherein said responding module transmits said query*
11   *response to the requester (page 2, section 0017 and page 7,*
12   *section 0205-0221).*

13   *Regarding claim 23, Blight et al. teaches a proxy as recited in*
14   *claim 15, wherein said responding module aggregates a plurality*
15   *of query responses before transmitting a particular response to*
16   *the requester (page 4, section 0075 and 0087 and page 5, section*
17   ***0110-0133).***

18   *Regarding claim 24, Blight et al. teaches an article of*
19   *manufacture comprising a computer usable medium having computer*
20   *readable program code means embodied therein for causing*
21   *requester discovery of a service, the computer readable program*
22   *code means in said article of manufacture comprising computer*
23   *readable program code means for causing a computer to effect the*
24   *steps of claim 1 (page 2, section 0017 and page 3, section 0044).*

25   *Regarding claim 25, Blight et al. teaches a program storage*
26   *device readable by machine, tangibly embodying a program of*
27   *instructions executable by the machine to perform method steps*
28   *for requester service discovery said method steps comprising the*
29   *steps of claim 1 (page 2, section 0017 and page 3, section 0044).*

30   *Regarding claim 27, Blight et al. teaches a computer program*
31   *product comprising a computer usable medium having computer*
32   *readable program code means embodied therein for causing*
33   *functions of a Service Discovery Proxy, the computer readable*
34   *program code means in said computer program product comprising*

Application/Control Number: 10/053,011   **13/15**

Docket No.: YOR920020013US1

1   *computer readable program code means for causing a computer to*

2   *effect the functions of claim 15 (page 2, section 0017 and page*

3   *3, section 0044).*

4   ***Claim Rejections - 35 use § 103***

5   *3.   The following is a quotation of 35 US.C 103(a) which forms*

6   *the basis for all obviousness rejections set forth in this Office*

7   *action: (a) A patent may not be obtained though the invention is not*

8   *identically disclosed or described as set forth in section 102 of this title, i*

9   *fthe di fferences between the subject matter sought to be patented and the prior*

10   *art are such that the subject ma\ler as a whole would have been obvious at the*

11   *time the invention was made to a person having ordinary skill in the art to*

12   *which said subject matter pertains. Patentability shall not be negatived by the*

13   *manner in which the invention was made.*

14   *4.   Claims 8 and 17 rejected under 35 u.S.C 103(a) as being*

15   *unpatentable over US 2002/0194498 to Blight et at in view of*

16   *Murphy et at*

17   *Regarding claim 8, Blight et at teaches a method as recited in*

18   *claim 7 (page 4, section 0075-0087 and page 5, section*

19   *0110-0133). Blight does not teach dynamically updating the list*

20   *of services cun-ently active in said local domain without*

21   *registering any of said services with a central registry. Murphy*

22   *et at teaches further comprising dynamically updating the list of*

23   *services culTently active in said local domain without*

24   *registering any of said services with a central registry*

25   *(abstract, columm 4, lines 19-32 and columm 6, line 59-columm 7,*

26   *line 5). Therefore it would have been obvious to one of ordinary*

27   *skill in the art at the time the invention was made to further*

28   *modify the mobile communication system for location aware*

29   *services of Blight et aI. by dynamically updating the list of*

30   *services cun-ently active in said local domain without*

31   *registering any of said services with a central registry because*

32   *this creates a more global system and relieves the registry of*

33   *having to keep up to date information on each service.*

34   *Regarding claim 17, Blight et at teaches a proxy as recited in*

35   *claim 15 (page 7, section 0205-0221) . Blight et al. does not*

Docket No.: YOR920020013US1

1   *teach establishes a listening pOli for incoming queries; and*
2   *communicates with a plurality of requesters with a transmission*
3   *protocol. Murphy et at teaches wherein said network communication*
4   *module further: establishes a listening pOli for incoming*
5   *queries; and communicates with a plurality of requesters with a*
6   *transmission protocol (colunm 4, lines 11-18). Therefore it would*
7   *have been obvious to one of ordinary skill in the art at the time*
8   *the invention was made to fuliher modify the mobile communication*
9   *system for location aware services of Blight et al. by*
10   *establishes a listening pori for incoming queries; and*
11   *communicates with a plurality of requesters with a transmission*
12   *protocol because the proxy will be able to receive all queries*
13   *that are trying to be submitted regardless of any obstruction*
14   *such as a firewall.*

15   This amendment brings claims 1-8, 10-13, 15-17, 19-25, and 27 to allowance. Claims 9, 14, 18

16   and 26 are canceled. A listing of the claims is provided as required in the new USPTO

17   amendment practice per 37 CFR 1.121.

18   It is anticipated that this amendment brings the application to allowance of all but the canceled

19   the claims. Favorable action is respectfully solicited. In the unlikely event that any claim

20   remains rejected, please contact the undersigned by phone in order to discuss the application.

21   Please charge any fee necessary to enter this paper to deposit account 09-0468.

22   Respectfully submitted,

23   By:
24   Dr. Louis P. Herzberg
25   Reg. No. 41,500
26   Voice Tel. (914) 945-2885
27   Fax. (914) 945-3281
28   IBM CORPORATION
29   Intellectual Property Law Dept.
30   P.O. Box 218
31   Yorktown Heights, New York 10598